

MAJOR DUTIES

Serves as an operator of a diesel or diesel-electric derrick or crane aboard a derrick barge or crane barge engaged in channel maintenance and hoisting services. The derrickboats have a displacement of up to 1000 tons, have load capacities up to 135 tons, and have boom lengths range up to 135 feet.

1. Operates levers controlling the raising and lowering of the boom, the horizontal movement of the boom or the horizontal movement of the cab and boom, the height of the hoisting line, and the opening and closing of the bucket attachments. Maneuvers barge by using current and spuds, by casting and pulling with boom and bucket, or by signaling pilot to maneuver the barge. Makes heavy lifts to and from docks, other vessels, and from underwater areas. Operates clamshell buckets, rock hooks, orange peels, and grapples used in digging, lifting, and depositing dredged materials (such as rocks, sand, clay and snags). Deposits materials removed on to deck of derrickboat or on dump scow. Deck loads are later removed to disposal areas. Lifts driven piling and core rock from old existing structures and drives new piling and places new core material.

2. While operating the crane, exercises caution, applies strict safety standards to avoid accidents (such as snapping hoist cables or spilling hoisted loads) and is responsible for the safety of crew members around the crane and hoisting areas. Performs maintenance and inspection of the plant before start of work. Inspects cables for wear, replacing those which are worn or frayed and directs lubrication of hoisting machinery as necessary.

3. Performs routine maintenance and repair work such as replacing work on broken engine parts, valves, cables, etc., and personally makes the more difficult slings and riggings. Directs members of the crew in performing preventive maintenance and in making emergency repairs to equipment. Maintains daily progress records used in the preparation and submission of daily and weekly reports.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Knowledge of vessel stability, ballasting, watertight integrity, construction and damage control. Knowledge of barge handling, including anchoring, mooring, positioning and towing.

--Skill in operation, assembly, disassembly, repair and adjustment of engines (including diesel) and other marine equipment such as boom, spuds, crane, buckets, pumps, winches, etc. Ability to operate derrick or crane smoothly and safely while observing standard hand signals.

--Knowledge of firefighting, basic lifesaving and emergency first aid, and emergency procedures and contingency plans.

RESPONSIBILITY

Receives oral work assignments to be accomplished from the barge master or supervisor. Work is evaluated in terms of efficient and economical operations as well as compliance with applicable instructions. Responsible for exercising knowledge of the derrickboat's capacities and limitations, checking rigging, estimating loads and distance, etc., in order to avoid capsizing the boat, injuring employees, damaging other plants and to obtain desired results. Performs work in accordance with regulations, plans, specifications, safety directives and various operating manuals. Responsible for the safety of the ground crew or other employees working in the area.

PHYSICAL EFFORT

Work requires walking, bending, reaching, standing for prolonged periods turning or moving hands, arms, feet and legs to direct or assist in operations on deck or below. Moderate physical effort is normally required in accomplishing tasks. Incumbent is subject to physical strain from swaying or jarring movements of the derrickboat.

WORKING CONDITIONS

Work is performed both inside and outside aboard floating plant in all types of weather. There is danger of drowning due to accident or storm (and particularly due to improper lifting or handling of heavy objects which may cause the derrick to overturn). There is further danger of injury due to blasting operations. Is subject to cuts, bruises, sprains, and broken bones. The possibility of falling or slipping on wet or icy decks, ladders, etc., is always present. Is exposed to dirt and grease when making repairs to vessel and machinery.

**OPERATOR, DERRICKBOAT
XH-5725-08
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Crane Operating, WG-5725, July 1999
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as an operator of a diesel or diesel-electric derrick or crane aboard a derrick barge or crane barge engaged in channel maintenance and hoisting services. The series that is closest to meeting describing this type of work is the Crane Operating Series, WG-5725. The series definition and the work described in the WG-5725 address land-based crane operating work. Subject position is descriptively titled Operator, Derrickboat, to distinguish it from land based crane operating work and in keeping with prevailing maritime titling practices.

2. GRADE DETERMINATION:

Derrickboats are equipped with orange peel and clam shell buckets, slings, hooks, and shackles. Operators install, maintain and repair mechanical and structural features of navigation locks and dams, loading and unloading heavy equipment and materials to and from barges; maintaining channels by dredging shoals, removing snags, rocks, submerged vessels and other obstructions; driving wood and steel piling by using diesel pile-driving hammers and attachments. The operator maneuvers boat by using current and spuds, by casting and pulling with boom and bucket, or by signaling pilot of towboat, tender or tugboat to maneuver boat. The operator must compensate for the shifting of the barge on the water while under load and must assure the safety of crew members on the barge.

This work exceeds that of the Engineer, Derrickboat, XH-07, as the engineer is responsible for the stationery engines and equipment on the derrickboat, but does not have the added responsibility of operating the derrick or crane. This work does not meet the Master, Derrickboat, XH-10, level as the operator does not also have the responsibility for supervising the crew assigned to the derrickboat.

NOTES ON USING THIS BENCHMARK

Licensed floating plant positions are ranked based on private industry practices. The Derrickboat Operator is ranked two grades below the Master, Derrickboat. If the duties, responsibilities and grade of the Master, Tug, Class I, as well as the derrickbarge characteristics, are significantly greater or less than this benchmark, the grade of the Derrickboat Operator may be graded higher or lower as well.

